

ZABRAMNY, D.T.

Express method for determining bitumens introduced into coal  
during briquetting. Uzb.khim.shur. no.1:93-94 '61.

(MIRA 14:1)

1. Institut khimii AN UzSSR.  
(Bitumen) (Briquets (Fuel))

ALIYEV, Ya.Yu.; ZABRAMNYY, D.T., doktor tekhn. nauk, otv. red.;  
EYDEL'MAN, A.S., red.

[Carbonylation of organic compounds] Karbonilirovaniye or-  
ganicheskikh soedinenii. Tashkent, Nauka, 1964. 203 p.  
(MIRA 17:11)

ZABRAMNYY, D.T.

Chemical concepts of the processes of formation of petrographic components of coals. Uzb.khim.zhur. 9 no.1:43-46 '65.

(MIRA 18:6)

I. Institut khim. i N. Obshchiny A.E.P.

ZABRAMNYY, D.T.

Comparative characteristics of the chemical properties of  
brown coal fusain with properties of lean coals. Uzb.  
khim. zhur. 7 no.2:39-46 '63. (MIFA 16:8)

1. Institut khimii AN UzSSR.  
(Fusain) (Coal)

MARKMAN, A.L.; ZABRAMNYY, D.T., doktor tekhn. nauk, otv. red.;  
BAKLITSKAYA, A.V., red.; KARABAYEVA, Kh.U., tekhn. red.

[Chemistry of lipids] Khimiia lipidov. Tashkent, Izd-vo  
AN Uzb.SSR. No.1.[Fatty acids] Zhirnye kisloty. 1963. 174 p.  
(MIRA 16:8)

(Acids, Fatty)

ZABRAMNYY, D.T. (Tashkent); NASRITDINOV, S. (Tashkent)

Chemical and petrographic characteristics of hydrogenation  
products of carbonized microcomponents. Izv.AN SSSR. Otd.tekh.  
nauk. Met.i topl. no.5:144-149 S-0 '61. (MIRA 14:10)  
(Hydrogenation)

SOFIYEV, I.S.; ZABRAMNYY, D.T.

Pile storage of coal under the climatic conditions of Central Asia.  
Izv. AN Uz. SSR Ser. khim. nauk no.1:77-84 '57. (MIRA 13:10)  
(Asia, Central---Coal---Storage)

ZABRAMNY, D.T.; NASRITDINOV, S.N.

Chemical nature of "chipped" fusain from Angren coal. Uzb.  
khim.shur. no.5:67-72 '59. (MIRA 13:2)

1. Institut khimii AN UzSSR.  
(Angren--fusain)

SOFIYEV, I.S.; SEMASHEVA, I.N.; ZABRAMNYY, D.T.

Accumulation of germanium in component of brown coal. Dokl.  
AN Uz.SSR no.8:34-36 '59. (MIRA 12:11)

1. Institut khimii AN UzSSR. Predstavлено akademikom AN UzSSR  
S.Yu.Yunusovym.  
(Germanium) (Coal)

*(On the)*  
ZABRAMNYY, D. T., Doc Chem Sci -- (diss) "Problem of the genetic  
classification of Central Asian coal and basic factors of the  
formation of clinkering humus coal." Tashkent, 1957. 24 pp.  
with schematic drawings. (Acad Sci UzbekSSR, Inst of Chemistry),  
160 copies. (KL, 9-58, 113)

- 13 -

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CIA-RDP86-00513R001963320016-0

ZABRAMNYY, D.T.; RYABOVA, N.D.

~~WORK of the chemical session. Uzb.khim.shur. no.1:95-97 '59.  
(MIRA 12:6)~~

(Uzbekistan--Chemistry)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0"

ZABRAMNYY, D. T.

О ПРИМЕНОЧНЫХ И ТЕХНОЛОГИЧЕСКИХ  
ОБРАЗОВАНИЯХ ВЪГЛЯ И КАРБОНАХ ДЛЯ

Д. Т. Забрамный

VIII Mendeleev Congress for General and Applied Chemistry in  
Section of Chemistry and Chemical Technology of Fuels,  
publ. by Acad. Sci. USSR, Moscow 1979

abstracts or reports scheduled to be presented at above mentioned congress.  
Moscow, 15 March 1979.

SOFIYEV, I.S.; ZABRAMNY, D.T.; SEMASHIEVA, I.N.

Distinctive characteristics of brown coals of Central Asia.  
(MIRA 13:1)  
Uzb.khim.shur. no.4:61-63 '59.

1. Institut khimii AN UzSSR.  
(Soviet Central Asia--Lignite)

SEREBRYAKOVA, Z.G.; KANTER, D.TS.; ZABRAN, E.S.; ZHERDEVA, L.G.; POTANIHA, V.A.

Methods for testing mineral oils used in the manufacture of  
acetate and viscose cord fibers. Khim. volok. no.1:62-64 '65.  
(MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo  
volokna (for Serebryakova, Kanter, Zabran). 2. Vsesoyuznyy  
nauchno-issledovatel'skiy institut po pererabotke nefti i gaza  
i polucheniyu iskusstvennogo zhidkogo topliva (for Zherdeva,  
Potanina).

NEMCHENKO, E.A.; FAYNBERG, E.Z.; SEREBRYAKOVA, Z.G.; ZABRAN, E.S.;  
YELCHINA, N.V.

Comparative evaluation of avivage preparations by the data of  
the measurement of the modulus of shearing. Khim. volck.  
no.4:62-64 '65. (MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskumstvennogo  
volokna.

JANAC, J.; ZABRANSKY, O.

Some applications of the UVP infrared analyzer. Prace Ust  
paliv vol. 7:197-211 '64.

POLAND / Chemical Technology. Cellulose and Its  
Derivatives. Paper.

H-33

Zabranska, W.

Abs Jour: Ref Zhur-Khimiya; No 14, 1959, 51979.

Author : Zabranska, W.

Inst : Not given

Title : Investigation of Indigenous Sulfate Soap and of  
Tall Oil.

Orig Pub: Przegl. papiern., 1958, 14, No 12, 353-358.

Abstract: Composition of different samples of sulfate soap  
(in %) varies in the following limits: water,  
27.2-37.3; ash, 9.4-11.5; sulfur, 0.14-0.33; un-  
saponified, 3.6-6.0; insoluble in petroleum ether,  
4.0-17.8; sum of the tar and fatty acids, 30.0-  
53.0; fatty acids, 16.0-23.8; tar acids, 19.0-33.0;  
tall oil content (T.O.), 51.6-59.0. Water content  
in TO ranges in the limits (in %) 0.9-14.6; ash,

Card 1/3

POLAND / Chemical Technology. Cellulose and Its Derivatives. Paper. H-33

Abs Jour: Ref Zhur-Khimiya, No 14, 1959, 51979.

Abstract: 0.9-1.6. The acid number of tall oil is 149-168; saponification number, 151-176; water soluble acids, 0.01-0.06% (corrected for H<sub>2</sub>SO<sub>4</sub>). Presented is the analytical evaluation of the purification process of sulfate soap by salting-out method. A possibility of lowering the combined sulfur and acid contents insoluble in petroleum ether is indicated. Distillation of TO in the laboratory and commercial plant conditions was conducted and the suitability of a fraction, containing tar acids, for paper industry (for glueing) was thus established. Also investigated was the corrosive action of TO on copper, aluminum,

Card 2/3

H-195

POLAND / Chemical Technology. Cellulose and Its  
Derivatives.

H-33

Abs Jour: Ref Zhur-Khimiya, No 14, 1959, 51979.

Abstract: and acid-resistant steel. Copper was found to be  
the least corrosion-resistant metal. -- A. A. Khov-  
anskaya.

Card 3/3

SERGEYEV, L. I.; ZABRANSKAYA, O. A.

Biological analysis of flower buds of stone fruit varieties.  
Fiziol.rast.2 no.2:160-166 Mr-Ap '55. (MLRA 8:10)

1. Nikitskiy botanicheskiy sad imeni V.M.Molotova, Yalta  
(Buds)

DRAGAVTSEVA, I.A.; ZABRANSKAYA, O.A.

Biology of the flowering and pollination of a cherry plum.  
Agrobiologija no.5:703-705 S.O '65. (MIRA 18:9)

1. Nikitskiy botanicheskiy sad, Yalta.

SOV/137-57-11-21385

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr. 11, p 105 (USSR)

AUTHOR: Zabranskiy, V.

TITLE: Manufacturing Tools by Die Forging (Proizvodstvo instrumenta kovkoy v antampakh)

PERIODICAL: Chekhosl. tyazhelaya prom-st'. 1957, Nr. 1, pp 40-50

ABSTRACT: A description is provided of the experiences of the Škoda Plant in Czechoslovakia in the press forging (P) of tools and dies. F is now used for cutters, milling cutters, scrapers, taps, mandrels, and other types of tools. Conversion from open-die forging to P is proved to be economical when the run of parts (PA)  $\geq$  300-500 pieces of carbon steel and  $\geq$  100-200 pieces of alloy tool and high-speed steel. Cold P, employed to extrude die shapes of more exact dimensions, and permitting the production of PA of a quality higher than that attainable by machining, is widely employed at this plant. In cold P, the unit pressure varied from 180 to 270 kg/mm<sup>2</sup> with various grades of steel. Hydraulic presses of 600, 1000, and 5000-t capacity are used for cold F of die impressions. A description is presented of the flowsheet for making a die for a spider.

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SOV/137-57-11-21385

Manufacturing Tools by Die Forging

The metal used for the die contains alloying elements in the following %:  
C 0.35, Mn 1.6, Si 0.37, Cr 1.74, Mo 0.61, and V 0.14. The metal used in  
the die-making die is Poldi Maximum steel. The quantities of alloying  
elements present, in %, are: C 0.81, Mn 0.9, Cr 3.3, Mo 0.6, V 1.15, and  
W 17.

V.Ya.

Card 2/2

ZABRYANSKIY, Yefim Il'ich

Detonatsionnaya stoykost' i vosplamenyayemost' motornykh topliv [Knock persistence and combustion in motor fuels, by] Ye. I. Zabryanskiy [ed] A. P. Zarubin. Moskva, Gosoptekhnizdat, 1958.

208 p. illus., diagrs., graphs, tables.

"Literatura": p. 207

ZABRANSKY, O., inz.

The VT-2 hygrometer of gas under pressure. Automatizace 7 no.11:  
299-300 N '64.

1. Institute of Fuel Research, Bechovice.

ZABRANSKY, V.

Automatic pressing of squares in screw-tap production. p. 215.

STROJIRENSKA VYROBA. (Ministerstvo tezkeho strojirenstvi, Ministerstvo presneho strojirenstvi a Ministerstvo automobiloveho prumyslu a zemedelskych stroju) Praha, Czechoslovakia. Vol. 7, no. 5, May 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 10, Oct. 1959. Uncl.

KORYTA, J.; ZABRANSKY, Z.

Kinetics of electrode processes of complexes in polarography. VII.  
Formation of the complex of cadmium ion with the ethylenediamino-  
tetraacetic acid as a reaction deactivating the product of rapid  
electrode reaction. Coll Cs Chem 25 no.12:3153-3158 D '60.  
(EEAI 10:9)

1. Polarographic Institute and Institute of Metallurgy, Czechoslovak  
Academy of Science, Prague.

(Electrodes) (Ions) (Polarograph and polarography)  
(Cadmium) (Ethylenedinitrilotetraacetic acid)

ZABRANSKY 2

## PHASE I BOOK EXPLOITATION

CZECH/2433

2(2,4)

International Polarographic Congress. 1st, Prague, 1951

Sborník I. Mezinárodního polárografického sjezdu. Díl 3: Matrní  
reflexy prodejene na plakátu. Prýrodečník. Vol. 3: Revue  
Read at the Congress. Praha, Průvodcecké vyd-va [1952]  
774 p. 2,000 copies printed.REP. Ed.: J. Koryta, Doctor; Chief Ed. of Publishing House:  
Karel Šimánek, Doctor; Tech. Ed.: Oldřich Dunek.PURPOSE: The book is intended for chemists, chemical engineers,  
and physicists.

COVERAGE: The book is a collection of reviews and original papers  
read at the International Polarographic Congress held in Prague  
in 1951. Use of Polarography in organic and inorganic analysis,  
biochemistry, medicine and industry. Inorganic analysis.  
In two sections, reviews Read at the Congress, Russian and  
either German or English translation of each review are  
presented. In the section "Organic", Russian and English translation  
of only those translations in Russian, German, and English which  
have not been published in Volume 1 are presented. The  
Congress, Professor Vojtěch Kremlička, Dean of the Faculty  
of Sciences, Karanec; Professor Milton Kemula, Dean of the Faculty  
of Planning; Professor Jaroslav Dolářský, Minister  
of the Congress; and Professor Jaroslav Horový, Chairman  
of the Center for Scientific Research and Technical  
Development. References follow each paper.

Průblik, J. Polarographic Determination of Oxygen in  
Illuminating GasJelíšek, Z. Use of Polarographic Methods in Control  
Technology of the Treatment of Metal SurfacesZabranský, Z. Determination of Thallium in Biological  
Materials[Russian translation]  
[German translation]Dobrovol, A. Polarographic Reduction of Hydrogen in  
Refined Iron in the Presence of Catalysts, That Is, Compounds  
of Iron with Catechol, Pyrogallol and Ascorbic AcidPalc, J., S. G. Šmejkal, and O. Schor. Polarographic  
Analysis of Benzoic Acid and Phthalic Anhydride

Čepík, O. Polarography of Cumarins

Card 7/14

ZABRANSKY, Z.

(2)  
Polarographic determination of small quantities of bis-

mercury in copper. Z. Zabransky (Polarograf. Ústav, ČSAV,  
Prague, Czech.). Česk. Listy 43, 617-18 (1954).—Bi is  
detd. polarographically after the removal of Cu with di-  
thizone (I). Dissolve 5 g. of Cu shavings contg. at least  
0.0005% Bi in 50 ml. concd. HNO<sub>3</sub>, evap. the soln. with 8  
ml. concd. H<sub>2</sub>SO<sub>4</sub>, cool, dil. with 80 ml. H<sub>2</sub>O, after the addn.  
of 1 ml. 50% citric acid; slowly treat with NH<sub>4</sub>OH until the  
ppt. redissolves. Mix the soln. with 50 ml. 50% KCN, dil.  
to 200 ml., ext. with six 3-ml. portions of 0.1% soln. of I in  
CHCl<sub>3</sub>, evap. the exts. to dryness, heat with 0.5 ml. concd.  
H<sub>2</sub>SO<sub>4</sub> and 30% H<sub>2</sub>O<sub>2</sub> to destroy org. matter, expel the ex-  
cess H<sub>2</sub>O<sub>2</sub>, dil. with 5 ml. 2M NaOAc contg. 0.03M comp-  
lexon III, and polarograph at pH 4 to a half-wave potential  
of -0.0 v.

M. Hudlický

10-12-54  
rmk

COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Physical Chemistry. Electrochemistry  
ABS. JOUR. : RZKhim., No. 1 1960, No. 619  
AUTHOR : Zabransky, Z.  
INST. :  
TITLE : Influence of pH upon the Polarographic Behavior  
of Cadmium Amalgam  
ORIG. PUB. : Chem. listy, 1958, 52, No 11, 2175-2177; Collect.  
Czechosl. Chem. Comms., 1959, 24, No 7, 2426-2428  
ABSTRACT : In solutions with  $\text{pH} < 9$ ,  $E_1$  and the height of  
the anodic wave of the Cd amalgam do not depend  
on the pH. At pH 9-10.5, the diffusion of  $\text{OH}^-$   
ions towards the electrode exerts an influence  
upon the electrode process and the wave is de-  
formed. In the case of  $\text{pH} > 11$ , with increase  
of pH the wave shifts towards the negative  
side; the value of this shift of  $E_1$  depends  
on the solubility product of  $\text{Cd}(\text{OH})_2$ . This

B

CARD:

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B-42

		B
COUNTRY	:	
CATEGORY	:	
ABS. JOUR.	:	RZKhim., No. 1 1960, No. 619
AUTHOR	:	
INST.	:	
TITLE	:	
ORIG. PUB.	:	
ABSTRACT cont'd	:	assumption is also corroborated by the slope of the curve of the dependence of $E_1$ upon pH and the course of the logarithmic graph of the wave. For the solubility product at infinite dilution, the value of $S = 1.6 \cdot 10^{-13}$ was found from polarographic measurements. These data relate to a non-buffer medium wherein neither complexes nor precipitations are formed, except for $\text{Cd}(\text{OH})_2$ . In the buffer medium, the pH of
CARD:	2/3	

COUNTRY :	B
CATEGORY :	
ABSTRACT JOUR. :	RZhkhim., No. 1 1960, No. 619
AUTHOR :	
INST. :	
TITLE :	
ORIG. PUB. :	
ABSTRACT cont'd :	which was established by means of the buffer solutions of Britton-Robinson, the dependence of $E_1$ on pH is more complicated since, in this case, the complexes of borates and phosphates with Cd ( $+2$ ) are being formed.-- P. Zuman
CARD:	3/3

B-43

ZABRANSKY, Z.

Kinetics of electrode processes of complexes in polarography. IV.  
Polarographic behavior of monovalent thallium in solutions of ethylene-  
diaminetetraacetic acid. In German. Coll.Cz.Chem. 24 no.9:3075-3083  
S '59. (ERAI 9:5)

1. Forschungsinstitut fur Hüttenwesen, Tschechoslowakische Akademie  
der Wissenschaften, Prag.  
(Electrodes) (Polarograph and polarography) (Thallium)  
(Solutions) (Ethylenedinitrotetraacetic acid) (Complex compounds)

ZABRE, J.

Metal binding between uranium and aluminum for fuel  
elements of nuclear reactors. Jaderna energie 8 no. 2:42 F '62

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CIA-RDP86-00513R001963320016-0

BLOKH, G.S.; ZABREBNEVA, A.V.; ZUBAREV, K.A.; PECHURO, S.S.; TVOROGOVA,  
Ye.L.; GNATYUK, T.A.

Producing gypsum fiber sheets on round-screen sheet-making  
machines. Stroi. mat. 8 no.2:15-17 F '62. (MIRA 15:3)  
(Gypsum products)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0"

ZABREJKO, M.

Checking the fulfillment of assignments in reducing construction  
costs. Fin. SSSR 22 no.3:83-84 Mr '61. (MIRA 14:7)

1. Upravlyayushchiy Novgorodskoy oblastnoy kontoroy Stroybanka.  
(Novgorod Province—Construction industry—Costs)  
(Novgorod Province—Banks and banking)  
(Auditing)

ZABREJKO, P.P.

Calculation of the Poincaré index. Dokl. AN SSSR 145 no.5:979-  
982 '62. (MIRA 15:8)

1. Voronezhskiy gosudarstvennyy universitet. Predstavлено  
akademikom I.G.Petrovskim.  
(Vector analysis)

ZABREYKO, P.P.

Relation between two principles of the fixed point for  
operators leaving a cone invariant. Uch. zap. AGU. Ser.  
fiz.-mat. nauk no.3:39-41 '63.

(MIRA 17:12)

ZABREJKO, P.P.

Continuity and complete continuity of P.S.Uryson's operators.  
Dokl. AN SSSR 161 no.5:1007-1010 Ap '65. (MIRA 18:5)

1. Submitted November 9, 1964..

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CIA-RDP86-00513R001963320016-0

ZABREJKO, P.F.

Perfect continuity of U bounded linear operators in  $L^p$   
spaces. zap. Kaz. un. 124 no.6:110-113 '64. (MIRA 1819)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0"

ZABIEJKO, P.P.; PUSTYL'NIK, Ye.I.

Interpolational properties of the absolute continuity of a  
linear operator. Uch. zap. Kaz. un. 124 no.6:114-118 '64.  
(MIRA 18:9)

ZABREJKO, P.P.; KRASNOSEL'SKIY, M.A.; PUSTYL'NIK, Ye.I.

Fractional powers of elliptic operators. Dokl. AN SSSR 165  
no. 5:990-993 D '65.  
(MIRA 19:1)

1. Voronezhskiy gosudarstvennyy universitet. Submitted April  
26, 1965.

ZABREYKO, P.P.; KRASNOSEL'SKIY, M.A.; PUSTYL'NIK, Ye.I.

Problem involving fractional powers of operators. Usp. mat.  
nauk 20 no.6:87-89 N-D '65. (MIRA 18:12)

1. Submitted Jan. 21, 1965.

ZABREJKO, F.P.; KRASNOSEL'SKIY, M.A.

Calculating the index of an isolated fixed point of a completely  
continuous vector field. Dokl. AN SSSR 141 no.2:292-295 N '61.  
(MIRA 14:11)

1. Predstavleno akademikom P.S.Aleksandrovym.  
(Vector analysis)

AM4016091

ential equations, the arrangement of roots of polynomials, singular points and periodic solutions of ordinary differential equations, critical points of harmonic and pseudoharmonic functions, oscillation theorems, two-point boundary problems, and others. It is designed for the reader familiar only with the principles of mathematical analysis, students specializing in physics and mathematics, graduate students, and scientists interested in various nonlinear problems. It can also serve as an introduction to more complicated branches of mathematics, connected with applications of topological methods. The book is based on a special course read by one of the authors (M.A.K.) at the Voronezh University and several papers delivered to the Voronezh Seminar on Functional Analysis.

TABLE OF CONTENTS [abridged]:

Foreword - - 5

Card 2/3

AM4016091

Ch. I. Rotation of vector field -- 7  
Ch. II. Index of singular points -- 61  
Ch. III. Applications -- 96  
Supplement -- 225

SUB CODE: MM

SUBMITTED: 04Jul63 NR REF Sov: 024

OTHER: 009

DATE ACQ: 19Dec63

Card 3/3

KRASNOSEL'SKIY, Mark Aleksandrovich; PEROV, Anatoliy Ivanovich;  
POVOLOTSKIY, Abram Isaakovich; ZABREJKO, Petr  
Petrovich; GORYACHEV, M.M., red.; AKSEL'ROD, I.Sh.,  
tekhn. red.

[Vector fields on a plane] Vektornye polia na ploskosti.  
Moskva, Fizmatgiz, 1963. 245 p. (MIRA 16:11)  
(Vector analysis)

ACC NR: AP6036833

SOURCE CODE: UR/0020/66/171/002/0262/0265

AUTHORS: Zabreyko, P. P.; Ledovskaya, I. B.

ORG: Voronezh State University (Voronezhskiy gosudarstvennyy universitet)

TITLE: On the N. N. Bogolyubov-N. M. Krylov's leading approximations method of averaging

SOURCE: AN SSSR. Doklady, v. 171, no. 2, 1966, 262-265

TOPIC TAGS: approximation method, ordinary differential equation, asymptotic method

ABSTRACT: The approximate averaging method of Bogolyubov-Krylov is generalized to the case of leading asymptotic approximation. Three cases are considered. The first is to determine the order of proximity for the solutions  $x(t)$  and  $\bar{x}(t)$  of the pair of equations

$$\begin{aligned} dx/dt &= X_0(t, x) + \epsilon X_1(t, x) + \dots + \epsilon^k X_k(t, x) + \epsilon^k \omega(t, x, \epsilon), \\ dx/dt &= X_0(t, x) + \epsilon X_1(t, x) + \dots + \epsilon^k X_k(t, x), \end{aligned}$$

for  $\epsilon > 0$ , with initial conditions  $x(0) = \bar{x}(0) = x_0$ . This is shown by means of a theorem which leads to the limiting expression

$$\lim_{\epsilon \rightarrow 0} \sup_{x(0) \in M(\epsilon, T), \bar{x}(0) \in M_A(\epsilon, T)} \max_{0 \leq t \leq T} |x(t) - \bar{x}(t)| = 0.$$

Card 1/2

UDC: 57.92

ACC NR: AP6036833

The second case deals with the pair of equations

$$\begin{cases} dx/dt = \epsilon X_0(x) + \dots + e^k X_{k-i}(x) + e^{k+i} X_k(t, x, \epsilon), \\ \dot{x} = \epsilon X_0(x) + \dots + e^k X_{k-i}(x) + e^{k+i} X_k(x). \end{cases}$$

For  $T > 0$  the proximity between these two equations is shown to be given by

$$\lim_{\epsilon \rightarrow 0} \sup_{x(t) \in \mathcal{U}(t, T/t), \tilde{x}(t) \in \mathcal{U}_k(t, T/t)} \max_{0 \leq t \leq T/\epsilon} \frac{\|x(t) - \tilde{x}(t)\|}{\epsilon^k} = 0,$$

through the use of a second theorem. The third deals with the equations

$$\begin{cases} dy/dt = \epsilon Y_0(y) + \dots + e^k Y_{k-i}(y) + e^{k+i} Y_k(t, y, \epsilon), \\ \dot{y} = \epsilon Y_0(y) + \dots + e^k Y_{k-i}(y) + e^{k+i} Y_k(y), \end{cases}$$

and

$$\begin{cases} dy/dt = \epsilon Y_0(y) + \dots + e^k Y_{k-i}(y) + e^{k+i} Y_k(y), \\ \dot{y} = \epsilon Y_0(y) + \dots + e^k Y_{k-i}(y) + e^{k+i} Y_k(y), \end{cases}$$

both satisfying identical initial conditions. A similar limiting expression is obtained as in case two above, with the provision that the condition  $(P_k)$  is satisfied, if all  $X_i$  and its derivatives up to order  $k-i$  are bounded. The authors express their gratitude to M. A. Krasnosel'skiy under whose guidance they worked. This paper was presented by Academician N. N. Bogolyubov on 31 January 1966. Orig. art. has 12 equations.

SUB CODE: 12/ SUBM DATE: 28Jan66/ ORIG REF: 004

Card 2/2

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0

ZABREJKO, P.P.; KRASNOSEL'SKIY, M.A.

Calculating the index of a fixed point in a vector field. 8ib.  
mat. zhur. 5 no.3:509-531 My-Je '64. (MIR 17:6)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0"

ZABREJKO, P.P.

Some properties of linear operators acting in  $L_p$  spaces. Dokl.  
AN SSSR 159 no.5:975-977 D '64 (MIRA 1831)

1. Voronezhskiy gosudarstvennyy universitet. Predstavлено  
akademikom A. Yu. Ishlinskim.

ZABREJKO, P.P.

Continuity of a nonlinear integral operator. Sib. mat. zbir.  
5 no.4 1958-960 Jl-Ag'64 (MIRA 17'88)

ZABRIK, D.; KUDLA, V.

Experiences with the use of the low-pressure vacuum extractor.  
Cesk. gyn. 28 no. 5:311-315 Je '63.

l. Gyn.-por. klin. Lek. fak. UPJS v Kosiciach, prednosta prof.  
dr. T. Schwarz.

(EXTRACTION, OBSTETRICAL)

ZEMBRICK, W.H.D.Y. SKRWD

Distr: 4E2c(m) 2

Hydrogen corrosion of steel and methods for its prevention. Preprint March 16, No. 2. 88-p. This paper discusses the process of gas diffusion at the surface and the factors affecting it are considered. The diffusion of gases takes place in a discontinuous manner and is a bilateral process. In gas corrosion films 0.04-0.5 μ thick are formed on Fe, Cu, Al, Mg, and other metals. The structure, d., and adhesion of these films det. the corrosion stability of the metal. H corrosion takes place with diffusion of H into the metal. Under specific conditions at. H can diffuse throughout the entire body of the metal. Diffusion occurs along the boundaries of the crystals, esp. along the sliding surfaces of crystals and at holes in the lattice of the metal. Temp. has the greatest effect on diffusion of H and H corrosion. The effect of the compn. of the scale on the rate of H evolution is noted. Steel contg. 0.85% C became most brittle. Data on the effect of temp. and pressure on H corrosion of steel contg. 0.76% C and on the effect of the C content of steel on the rate of decompr. of cementite are given. The best method for the detn. of the effect of H on steel is the detn. of the resilience. A method for reducing the effect of H on steel is the use of low-C steels. Alloy-

ZABRINSKI, W.

"Minerals of magna origin in the Strzegom granite massif," Przeglad Geologiczny,  
Warszawa, No 3, June 1953, p. 9.

SO: Eastern European Accessions List, Vol 3, No 11, Nov 1954, L.C.

ZABRIYEVA, N.M.; MACHABELI, M.S.

New method of intravital motion picture photomicrography of the hemostatic process; model of the thrombohemorrhagic syndrome obtained by the method of the parenteral administration of viper venom. Soob. AN GruzSSR 37 no.2:467-475 F '65. (MIRA 18:3)

1. Institut eksperimental'noy i klinicheskoy khirurgii i gematologii, Tbilisi. Submitted December 1, 1964.

S/081/62/000/012/007/065  
B168/B101

AUTHORS: Czerwiński, Zenon, Zabrocki, Władysław, Rychter, Stanisław

TITLE: Changes in the surface of crystals of  $\text{NaBr} \cdot 2\text{H}_2\text{O}$  and  
 $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$  under the influence of adsorbed ions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 38, abstract  
12B249 (Studia Soc. scient. torunensis, v. 3, no. 1, 1961,  
1 - 36)

TEXT: In order to explain the changes in habit of crystals of  $\text{NaBr} \cdot 2\text{H}_2\text{O}$   
and  $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$  growing from a saturated solution when admixtures are  
added, the surface tension and viscosity were measured and the number of  
ions adsorbed on the surface of the forming crystals was determined. It  
was established that this number depends on the size of the crystals and  
that the nature of the changes in habit is determined entirely by the  
"physical" adsorption. X-ray examinations confirm this conclusion.

[Abstracter's note: Complete translation.]

Card 1/1

ZABRODA, G.S., nauchnyy sotrudnik (Kiyev, 51, ul. Menzhinskogo, d.49,  
kv.1)

Possible defects in a mechanical suture related to improper  
use of the UKL apparatus in pneumonectomies and lobectomies.  
Klin.khir. no.11:74-77 N '62. (MIRA 16:2)

1. Klinika torakal'noy khirurgii (zav. - chlen-korrespondent  
AMN SSSR, prof. N.M. Amosov) Kiyevskogo nauchno-issledovatel'-  
skogo instituta tuberkuleza i grudnoy khirurgii.  
(SUTURES) (LUNGS-SURGERY)

ANOSOV, N.M.; BEREZOVSKIY, K.K.; ZABRODA, O.S.

Result of 100 pneumonectomies with use of the UKL-60. Iksp. khir. 3  
no. 6:3-7 N-D '58. (MIRA 12:1)

1. Iz kliniki torakal'noy khirurgii (zav.- prof. N. M. Anosov) Ukrainian-  
skogo instituta tuberkuleza imeni F. G. Yanovskogo (dir. dota. A. S.  
Mamolat).

(PNEUMONECTOMY

appar. for suturing lung stump (Rus))

YEFIMOVICH, Ye.K.; NESTEROV, V.V.; TYUTYUNNIKOV, N.F.; SHINKARSKY, D.G.;  
ZABRODA, Yu.F.; KONDRAT'YEV, O.K.; GORODNICHENKO, A.I.

Automatic level control of flotation concentrate in vacuum  
filter baths. Avtom.i prib. no.3:21-23 Jl-8 '62. (MIRA 16:2)

1. Institut avtomatiki Gosplana UkrSSR (for Yefimovich,  
Nesterov, Tyutynnikov, Shinkarskiy, Zabroda, Kondrat'yev).
2. Dneprodzerzhinskiy koksokhimicheskiy zavod imeni  
Ordzhonikidze (for Gorodnichenko).

(Flotation)  
(Liquid level indicators)

ZABRODIN, A. rukovoditel' brigady kommunisticheskogo truda

March forward! Vest.ugl. 9 no.9:24 8'60. (MIRA 13:10)

1. Shurabskaya shakhta No. 8, Tadzhikskogo sovnarkhoza.  
(Tajikistan--Coal miners)

ZABRODIN, A.N.

The Baku automobile repair shop sends out jobs containing flaws.  
Neftianik 1 no.8:33 Ag '56. (MIA 9:11)

1. Glavnnyy nekhanik tresta Sredasnefteazvedka.  
(Baku--Automobiles--Repairing)

ASTVATSATUROV, Ye.L., inzh.; ZABRODIN, A.S., kand. geol.-mineralogicheskikh nauk; KOKOR'eva, K.I., inzh.; TARKANOV, R.A., inzh.; CHISTYAKOV, S.V., kand.tekhn.nauk

[Photogrammetric method for the geological documentation of underground mines; methodological instructions] Fotogrammetricheskiy metod geologicheskoi dokumentatsii podzemnykh gornykh vyrabotok; metodicheskie ukazaniia. Leningrad, 1963. 25 p.

(MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gornoj geomekhaniki i marksheyderskogo dela. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut gornoj geomekhaniki i marksheyderskogo dela.

ZABRODIN, A.S., Cand Geol Min Sci -- (diss) "Analysis of fault  
breaks on the example of the Kuznets Bassin." Tomsk , 1958,  
16 pp (Min of Higher Education USSR. Tomsk Order of Labor  
Red Banner Polytechnic Inst im S.M. Kirov) 100 copies  
(KL, 27-58, 105)

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"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0

ZABRODIN, A.S., kand. geol.-minor. push; PETROV, M.Ye, inzh.

Results of using the acoustic method for determining the distance to cavities and geological contacts in rock salt deposits.  
[Trudy] VNIMI no. 50:336-343 '63.

(MIRA 17:10)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0"

GODUNOV, S.K., (Moskva); ZABRODIN, A.V. (Moskva)

Difference schemes of second-order accuracy for multidimensional problems. Zhur.vych.mat.i mat.fiz. 2 no.4:706-708 Jl-43 '62.  
(MUA 15:8)

(Difference equations)

10.1410

31108

S/208/61/001/006/005/013

B112/B138

AUTHORS: Godunov, S. K., Zabrodin, A. V., Prokopov, G. P. (Moscow)

TITLE: Difference scheme for two-dimensional non-stationary problems of gas dynamics and calculation of a flow with a shock wave that runs backward

PERIODICAL: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki,  
v. 1, no. 6, 1961, 1020-1050

TEXT: In this paper, the authors continue investigations of difference schemes for non-stationary problems of gas dynamics (cf. S. K. Godunov, Matem. sb., 1959, 47, no. 3, 271-306). In order to solve the system

$$\oint \rho dx dy + \rho u dy dt + \rho v dx dt = 0,$$

$$\oint \rho u dx dy + (p + \rho u^2) dy dt + \rho u v dx dt = 0, \quad (2.2)$$

$$\oint \rho v dx dy + \rho u v dy dt + (p + \rho v^2) dx dt = 0,$$

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S/208/61/001/006/005/013  
B112/B138

Difference scheme for two-dimensional...

$$\oint p \left( e + \frac{u^2 + v^2}{2} \right) dx dy + pu \left( e + \frac{p}{\rho} + \frac{u^2 + v^2}{2} \right) dy dt + \\ + \rho v \left( e + \frac{p}{\rho} + \frac{u^2 + v^2}{2} \right) dx dt = 0 \quad (2.2),$$

the authors use the following difference scheme

$n-3/2,$	$n-1/2,$	$n+1/2,$	$n+3/2,$	$n+5/2,$	$\uparrow h_u$
$m+3/2$	$m+1/2$	$m-1/2$	$m-3/2$	$m-5/2$	$\downarrow$
$n-3/2,$	$n-1/2,$	$n+1/2,$	$n+3/2,$	$n+5/2,$	$\uparrow h_y$
$m-1/2$	$m+1/2$	$m+3/2$	$m+5/2$	$m+7/2$	$\downarrow$
$n-3/2,$	$n-1/2,$	$n+1/2,$	$n+3/2,$	$n+5/2,$	$\uparrow h_u$
$m-7/2$	$m-5/2$	$m-3/2$	$m-1/2$	$m+1/2$	$\downarrow$
$\leftarrow h_x \rightarrow$					

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31108

S/208/61/001/006/005/013

B112/B138

Difference scheme for two-dimensional...

Discontinuity disintegration is calculated using the scheme

$$\begin{aligned} a_n = b_n &= \sqrt{\gamma \frac{p_{n+\frac{1}{2}} + p_{n-\frac{1}{2}}}{2} \frac{p_{n+\frac{1}{2}} + p_{n-\frac{1}{2}}}{2}}, \\ p_{n,p} &= \frac{p_{n+\frac{1}{2}} + p_{n-\frac{1}{2}}}{2} + a_n \frac{u_{n+\frac{1}{2}} - u_{n-\frac{1}{2}}}{2}, \\ u_{n,p} &= \frac{u_{n+\frac{1}{2}} + u_{n-\frac{1}{2}}}{2} + \frac{p_{n+\frac{1}{2}} - p_{n-\frac{1}{2}}}{2a_n}. \end{aligned} \quad (3.3)$$

It is based on the formula  $p = (\gamma - 1) \rho e$ . The stability condition of the scheme is derived. In the latter part of the article, the authors use nets which are moved in accordance with the flow. Cases of axial symmetry, in particular that of a sphere, are considered.

I. G. Petrovskiy, O. M. Belotserkovskiy (Prikl. matem. i mekhan., 1960, 24, no. 3, 511-517), and A. A. Dorodnitsin are mentioned. I. M. Gel'fand, K. A. Bagrinovskiy, G. N. Novozhilov, V. V. Lutsikovich, and K. A. Semendayev are thanked for assistance. There are 15 figures and 3 Soviet references.

SUBMITTED: May 7, 1961

Card 3/3

ZABRODIN, B.A.

IVANCHEKO, I.A., laureat Stalinskoy premii; ZABRODIN, B.A., laureat Stalinskoy premii; SIDOROV, Ye.A., laureat Stalinskoy premii; ZHELEVICH, P.M., inzhener; redaktor; VERNINA, G.P., tekhnicheskij redaktor.

[Industrial methods and mechanization in reinforced concrete bridge construction] Industrializatsija i mekhanizatsija postroiki shle-zobetonnykh mostov. Moskva, Gos.transp.zhel-dor. izd-vo 1952. 185 p.  
[Microfilm]  
(Bridges, Concrete)

GOLYAND, S.M.; FRENKEL', Ya.I.; BAROCHINA, B.Ya.; ZABRODIN, B.G.

Removal of hydrogen sulfide from the exhaust air in viscose manu-  
facture by means of an alkaline solution in a Venturi tube. Khim.  
volok. no.2:49-52 '60. (MIRA-13)12)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut promyshlennoy  
i sanitarnoy ochistki gazov (for Golyand, Frenkel'). 2. Vsesoyuznyy  
nauchno-issledovatel'skiy institut iskusstvennogo volokna (for  
Barochina). 3. Kalininskiy kombinat (for Zabrodin).  
(Viscose) (Hydrogen sulfide)

ZABRODIN, B.G.

"Manufacture of viscose staple fiber" by P.P. Matissean,  
N.S. Kiseleva. Reviewed by B.G. Zabrodin. Khim. volok. no.2:  
81 '59. (MIRA 12:9)

1.Kalininskiy kombinat.  
(Rayon) (Matissean, P.P.) (Kiseleva, N.S.)



ANTIPIN, G.V., mashinist elektrovoza, Geroj Sotsialisticheskogo Truda; BELYAKOV, I.I., elektronik; PESCHYANOV, I.R., Geroj Sotsialisticheskogo Truda; DEDISKIN, A.I., mashinist-instruktor; KAMONIN, N.I., tekhn-ratsionalizator; KAZACHEK, I.K.; CHEN HUA-DIN [Ch'eng Hua-ting]; U FYN [Wu Feng]; LYU I [Liu I]; YAN CHAO [Yang Chao]; TIKHMENEV, B.I., doktor tekhn.nauk; ZAICHEN, P.V., inzh. (g.Parikh); RUMYANTSEV, V.A., inzh.; PIVOVAROV, G.I.

A feat which will live forever. Elek. i tepl. tiaga 5 no. 5:1-3 May '61. (MIRA 14:7)

1. Depo Krasnoyarsk (for Antipin).
2. Osnovaya distantsiya kontaktnoy seti (for Belikov).
3. Master avtomatnogo tselha depo Liski (for Peschyanov).
4. Lokomotivnoye depo Orenburg, rukovoditel' kolonny teplovozov imeni XXII "yezda partii" (for Deniskin).
5. Instrumental'nyy tsentr kommunisticheskogo truda lokomotivnogo depo Kuybyshev (for Kamonin).
6. Literaturnyy sotrudnik gazety "Kuybyshevskiy zheleznodorozhnik" (for Kazachek).
7. Moskovskiy institut inzhenerov transporta (for Chen Hua-din, U Fyn, Lyu I, Yan Chao).
8. Rukovoditel' laboratori peremennogo toka Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozh'nogo transporta Ministerstva putev'y soobshcheniya (for Tikhmenev).
9. Nachal'nik depo Leningrad-Baltiyskiy (for Pivovarov).

(Astronautics)

FIL'KOV, N.I.; MAYZEL', M.M.; POLUKHIN, N.P.; ZABRODIN, B.V.;  
KISELEVA, N.P., red.

[Maintenance and repair of the VMEl diesel locomotive]  
Remont teplovoza VMEl. Moskva, Izd-vo "Transport,  
1964. 136 p. (MIRA 17:8)

AZROVA, TS.S.; ARKHIPOV, A.P.; VINOGRADOV, A.V.; GRABOVSKIY, I.V.;  
GRISHINA, R.I.; DMITRIYEV, P.D.; DUBINSKIY, Ye.L.; ZABRODIN,  
B.V.; KOLOTIY, M.V.; KIRASNOV, B.S.; KURDYUKOVA, N.V.; LITVOVA,  
~~IU.M.~~; OBUKHOVA, A.V.; POMIN, V.G.; MEDVEDEVA, M.A., tekhn.  
red.

[Album of drawings of TE3, TE7, TE2, TE1, TEM1, and TU2  
diesel locomotives; electric apparatus] Al'bom chertezhei  
teplovozov TE3, TE7, TE2, TE1, TEM1 i TU2; elektricheskie  
apparaty. Moskva, Transazheldorizdat. Vol.2. 1963. 394 p.  
(MIRA 16:9)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye lokomotivnogo  
khozyaystva.  
(Diesel locomotives--Electric equipment)

ZABRODIN, B.V., inshe.

Methods of improving electric locomotive gear transmission.

Elek. i tepl. tiaga no.1:14-16 '57. (MIRA 12:3)

(Electric locomotives)

ZABRODIN, B.V., inzh.

Repair systems, selection of suspension types, and standardization  
of electric rolling stock components. Elek. i tepl.tiaga 3 no.2:  
45-46 F '59. (MIRA 12:4)

(Warsaw--Electric railroads--Congresses)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0

ZAFRODIN, B.V., inzh.

French CCl0002 type electric locomotive with one traction engine  
for three axles. Elek. i tepl. tiaga 6 no. 5:46-48 My '62. (MIRA 15:6)  
(France—Electric locomotives)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0"

SAVOS'KIN, Anatoliy Nikolayevich; ZABRODIN, B.V., inzh., ratsenzerz;  
PEROVA, A.A., kand. tekhn. nauk, red.; VOROB'YEVA, L.V., tekhn.  
red.

[Spring suspensions of electric locomotives] Ressornoe podveshi-  
vanie eleketrovozov. Moskva, Transzheldorizdat, 1962. 53 p.  
(MIRA 15:12)

(Electric locomotives)

ZABRODIN, Boris Valer'yevich, inzh; KHLEBNIKOV, V.N., red.

[Electric rolling stock on French railroads] Elektropod-vizhnoi sostav frantsuzskikh zheleznykh dorog. Moskva, Transport, 1965. 273 p. (MIRA 18:2)

ZABRODIN, D.M., kand. istorich. nauk; KALYUZHNAIA, N.K.; MAYSTRENKO, L.F.; MYSNICHENKO, V.P.; PAKHNIN, Ye.I.; SHAPOVAL, A.P.; VASHCHENKO, G.I., red.; KAMINSKIY, L.N., red.; LIANOVA, M.I., tekhn. red (MIRA 16:6)

[Work and live the communist way, 1958-1962] Rabotat' i zhit' po kommunisticheski; 1958-1962. Sbornik dokumentov i materialov. Khar'kov, Khar'kovskoe knizhnoe izd-vo, 1963. 250 p.

(MIRA 16:6)

1. Kommunisticheskaya partiya Ukrayiny. Khar'kovskiy oblastnoy komitet. Partiyny arkhiv.  
(Kharkov--Efficiency, Industrial)

ZABRODIN, G.D.

Role of alcoholic intoxication in the detection of schizophrenic  
symptoms. Probl.sud.psikh. no.12:108-115 '62. (MIRA 16:4)  
(ALCOHOLISM) (SCHIZOPHRENIA)

ZABRODIN, G.D.

Correlation of the clinical characteristics of schizophrenic remissions complicated by alcoholic intoxication with some pathophysiological and immunological indices. Zhur. lepr. i psich. 64 no.3:404-410 '64. (MIRA 17:5)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sudebnoy psichiatrii im. Serbskogo (direktor - dotsent G.V. Morozov), nauchnyy rukovoditel' raboty - prof. S.F. Semenov, Moscva.

ZABRODIN, G.D.

State of alcoholic intoxication in a schizophrenic. Prak. medico-psich. ekspert. no. 7:28-35 '62. (NORA 16:2)  
(SCHIZOPHRENIA) (ALCOHOLISM)

AGOSHKOV, M.I.; ZABRODIN, I.M.

Fifteenth anniversary of the World Federation of Scientific Workers.  
Vest. AN SSSR 31 no.10:109-111 O '61. (MIRA 14:9)

1. Chlen-korrespondent AN SSSR (for Agoshkov).  
(Learned institutions and societies)

ZABRODIN, K.T., inzh.

Broaches used for greeving slits. Mash.Bel. no.4:116-117 '57.  
(Broaching machines) (MIRE 11:9)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0

KISLEV, D.; ROGLIN, A.; ZABRODIN, M.

Currency circulation in economic regions of the Russian  
Federation. Den. i kred. 17 no.9:3-8 S '59. (MIRA 12:12)  
(Money)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963320016-0"

ZABRODIN, M.V.

We are walking toward the cherished goal. Zhivotnovodstvo 24  
no.5:7-9 My '62. (MIRA 16:10)

1. Direktor svinovalcheskogo sovkhoza "Terek", Mozdokskogo  
rayona, Severo-Osetinskoy ASSR.

S/137/62/000/001/016/237  
A060/A101

AUTHORS: Zabredin, N. I., Nechayeva, A. A., Korobochkina, T. V.

TITLE: Content of rare alkali elements in the mineral salts of the Soviet Union and plans for their industrial extraction

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 5-6, abstract 1042  
(V sb. "Redk. shchelochnye elementy". Novosibirsk, Sib. otd. AN SSSR,  
1960, 97-100)

TEXT: The authors report on the results of a study of the content and distribution of rare alkaline elements in the mineral salts of the Soviet Union. The concentration of Cs and Tl in the mineral salts studied is not industrially worthwhile. The Sr content in some waters and salts attains up to 0.01 - 0.1%, and sometimes up to 1%, however, their processing is for the meanwhile inexpedient, in view of the large stores of Sr in ores. Slimes and clayey materials of salt rocks and lake-bottom deposits are always enriched with Rb and usually contain it in a ratio of  $n \cdot 10^{-2}\%$ . These products may be considered as a potential natural base with practically unlimited stores of Rb. Traces of Rb are noted in other salt rocks not containing potash salts. In the natural

Card 1/2

Content of rare alkali elements ...

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A060/A101.

waters and brines of salt lakes the Rb content does not exceed  $n \cdot 10^{-4}$  %. Only Solikamsk carnalites and the exhausted electrolyte obtained from their processing in magnesium plants are of practical importance as raw Rb sources at the present time. The electrolyte contains 0.03 - 0.04% Rb. A new method is worked out for extracting Rb from spent electrolytes by the use of ion-exchange. Li is also concentrated in slime and clayey materials, but, in contradistinction to Rb which then passes into the solid phase, Li together with B remain in eutonic solutions. Boron-bearing strata of salts and salt bosses contain up to 0.1% Li<sub>2</sub>O. In the course of processing these products for potash manure and boron products, it will probably be possible to extract Li by the way. Another possible source of Li extraction may be the brines of salt lakes and underground waters containing  $(1 - 2) \cdot 10^{-3}$  % Li, in the course of their complex processing for soda, borax, Br, I.

S. Rossovskiy

[Abstracter's note: Complete translation]

Card 2/2

ZABRODIN, IV.

PHASE I BOOK EXPLOITATION SOV/5747

Vsesoyuznoye soveshchaniye po redkim shchelochnym elementam. 1st,  
Novosibirsk, 1958.

Redkiye shchelochnyye elementy; obornik dokladov soveshchaniya po  
khimii, tekhnologii i analiticheskoy khimi. redkikh shchelochnykh  
elementov, 27-31 yanvarya 1958 g. (Rare Alkali Elements; Col-  
lection of Reports of the Conference on the Chemistry, Technology,  
and Analytical Chemistry of Rare Alkali Elements, Held 27-31  
January, 1958) Novosibirsk, Izd-vo Sibirsogo otd. AN SSSR, 1960.  
99 p. 1000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR, Sibirskoye otdeleniye.  
Khimiko-metallurgicheskiy institut.

Resp. Ed.: T. V. Zabolotskiy, Candidate of Technical Sciences;  
Members of Editorial Board: A. S. Mikulinskiy, Professor, Doctor  
of Technical Sciences, A. T. Logvinenko, Candidate of Technical  
Sciences, Y. F. Barkova, Candidate of Chemical Sciences; Ed.:  
V. N. Bushuyeva; Tech. Ed.: A. F. Mazurova.

Card 175

Rare Alkali Elements; Collection (Cont.)

SOV/5747

17

**PURPOSE:** This book is intended for chemical engineers and technicians working in metallurgical and mining operations and related enterprises.

**COVERAGE:** The collection contains reports which deal with the physical and analytical chemistry of rare alkali elements and their compounds and their reactions with mineral ores and salts. Methods of extraction and modern analytical techniques and equipment are also discussed. No personalities are mentioned. References accompany individual articles.

TABLE OF CONTENTS:

Urazov, G. G. [Deceased], V. V. Plyushchev, Yu. P. Simeonov, and I. V. Shaidrov [Moskovskiy institut tonkoy khimicheskoy tekhnologii im. (M.V.) Lomonosova - Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov]. High-Temperature Modification of Spodumene 5

Plyushchev, V. Ye. [Moscow Institute of Fine Chemical Technology]

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Rare Alkali Elements; Collection (Cont.)

SOV/5747

Kozlov, A. S. [Khimicheskiy fakul'tet Moskovskogo gosudarstven-nogo universiteta - Chemistry Department of Moscow State University].  
A New (Turbidimetric) Method of Determining Small Amounts of  
Cesium With the Aid of Cadmium and Cadmium Ferrocyanides 79

Galkina, N. K., and M. M. Senyavin. [Institut geoхimii i  
analiticheskoy khimii AN SSSR - Institute of Geochemistry  
and Analytical Chemistry of the Academy of Sciences USSR]  
Chromatographic Separation of Mixtures of Alkali Metals 87

Zabrodin, N. I., A. A. Nechayeva, and T. V. Korobochkina.  
[Vsesoyuznyy nauchno-issledovatel'skiy institut galurgii - All-Union Scientific Research Institute of Metallurgy]. The Content  
of Rare Alkali Elements in Natural Salts of the Soviet Union  
and Prospects of Its Utilization in Industry 97

AVAILABLE: Library of Congress (QD 172.A4V8)

JA/rsm/jw  
11-27-61

Card 5/5

ZABRODIN, N.I., kand. tekhn. nauk; TURKIN, B.P.

Determining the amount of potassium chloride in mother liquors by  
means of natural  $\beta$ -activity of  $K^{40}$ . Zhim. nauka i prom. 3 no.11  
104-108 '58. (NIRIA 11:3)

(Potassium chloride) (Potassium--Isotopes)

ZABRODIN, O.N.

Experimental gastric ulcers induced by combined immobilization  
and electrization of rats and pharmacotherapy. Farm, i toks.  
28 no.6:717-719 N-D '65. (MIRA 19:1)

1. Otdel farmakologii (zav. - deyatel'nyy chlen AMN SSSR  
S.V.Anichkov, Instituta eksperimental'noy meditsiny AMN SSSR,  
Leningrad.

ZABROD'IN, O.N.

Analysis of the development of destructive changes in the mucous membrane of the gastric wall during combined immobilization and electrization of rats. Pat. fiziol. i eksp. terap. 9 no.3:68  
My-Je '65. (MIRA 18:9)

1. Otdel farmakologii (zav.- deystvitel'nyy chlen AMN SSSR prof. S.V. Anichkov) Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad.

ZABROVIN, P., starshiy inzh. po tekhnike bezopasnosti

We study and prevent. Okhr. truda i sots. strakh. 5 no.5:10-11  
My '62. (MIRA 15:5)

1. Voskresenskaya splavnaya kontora.  
(Gorkiy Province--lumbering safety measures)

ZABRODIN, P.I. (Moskva); RAKOVSKIY, N.L. (Moskva); ROZENBERG, M.D. (Moskva)

Using radiation methods in investigating the flow of intersoluble liquids. Izv.AN SSSR. Otd.tekh.nauk.Mekh. i mashinostr..no.4:  
43-47 Jl-Ag '61. (MIRA 14:8)  
(Hydrodynamics) (Radioisotopes—Industrial applications)

ZABRODIN, P.I.; RAKOVSKIY, N.L.; RIZINBERG, M.D.

Motion of mutually soluble fluids of varying viscosities in  
a linear model of a uniform layer. Trudy VNII no.40:53-77\*63  
(MIRA 17\*7)